

ABSTRACT

A vertical and a horizontal vacuum sublimation apparatus with high efficiency and processes thereof are provided, especially for the materials with high melting point and low vapor pressure. The vertical sublimation purification apparatus comprises a sublimation channel body, a material rack, a heating evaporation device, a condensation device, an incubating device, and a product scratching device. The horizontal sublimation purification apparatus comprises a sublimation channel body, a material carrier, a heating evaporation device, and two end pipes. The apparatuses of the present invention can be applied to the mass production of high purity chemicals, and are capable of sublimating and purifying OLED illumination layer materials including Alq₃, NPB and CuPc, which have high melting temperature and low vapor pressure.